



Normally associated with aging, osteoporosis is a condition where the bones become weak and fragile due to decreased bone mass. Although there is no cure for osteoporosis, you can take steps to prevent it. We share with you some information to help you better understand the condition.

# Osteoporosis, The Silent Thief

## Causes Of Osteoporosis

By the age of 30, most people would have reached their peak bone mass. After that age, small amounts of bone are lost naturally. In the normal process, bones get replaced as they are lost. Osteoporosis occurs when bone is lost faster than it is replaced. The gradual reduction in bone density means that the bones become weaker and are less capable of withstanding stresses. Thus, the risk for fracture (crack or break in the bone) increases.

## Signs Of Osteoporosis

A "silent" disease, there are usually no signs and symptoms in the early stages. However as osteoporosis progresses, the following may occur:

- back pain
- loss of height over time
- fractures of the wrists, hips, spine or other bones

## Who Is At Risk Of Osteoporosis?

Although the condition affects more women than men, men can also get osteoporosis. Risk factors for osteoporosis include:

- Being female
- Age above 65 years
- A family history of osteoporosis
- Menopausal women or women whose ovaries have been removed
- Insufficient calcium intake
- Inactive lifestyle
- Excessive alcohol intake
- Smoking

## Detecting Osteoporosis

A Bone Mineral Density (BMD) scan may be used to confirm osteoporosis. It is a reliable and affordable alternative to normal X-rays which can only detect low bone density or osteoporosis when at least 30% of the bone mass has been lost. BMD measures bone density at various areas such as the wrist, spine and hips. It can also detect low bone density (an indicator of osteoporosis) and the rate of bone loss.

Bone density can be measured with the Dual Energy X-ray Absorptiometry (DXA) Bone Densitometer, available in NUH's Bone Densitometry Laboratory. DXA is a painless, non-invasive X-ray technique that compares the bone density of an individual to the normal values matched for age, sex and race. The radiation exposure is very small (equivalent to less than 5% of a typical chest X-ray) and a typical scan of the spine and hip takes only about 10 minutes. By using bone densitometry to diagnose osteoporosis early, doctors can manage and treat patients more effectively and prevent complications in later life.

## Can Osteoporosis Be Treated?

Unfortunately, osteoporosis cannot be cured. Thus, the key is prevention. If you are at risk of osteoporosis, your doctor may prescribe you certain medicines which can help to reduce the rate of bone loss.

## To Prevent Osteoporosis, You Should:

- Take enough calcium and Vitamin D to build strong bones.
- Do weight-bearing and resistance exercises (eg. brisk walking and jogging) for at least 20 minutes, at least three times a week. They stimulate the bones to grow stronger and prevent osteoporosis.
- Limit alcohol intake as too much can reduce bone formation and the body's ability to absorb calcium.
- Don't smoke as smoking causes bone loss.

Remember, osteoporosis can be prevented. So start now by making healthy lifestyle changes.